Notes on the Medical Museum of the Armed Forces Institute of Pathology

By Helen R. Purtle, *Assistant Curator*

Medical Museum
Armed Forces Institute of Pathology
Washington, D. C.

THE Medical Museum is one of four major components of the Armed Forces Institute of Pathology, formerly the Army Medical Museum. In 1862 Surgeon General William A. Hammond established the Army Medical Museum for the purpose of collecting specimens and related records of wounds and diseases incurred in the Civil War for study by medical officers in Washington, in the hope of reducing mortality and suffering among the soldiers.

The Army Medical Museum was originally given space in the Surgeon General's Office at 180 Pennsylvania Avenue. When it became essential to obtain larger quarters, the Corcoran School House on "H" Street was taken possession of by the Government and turned over to the Medical Department for the use of the Army Medical Museum. The contents of the Museum were moved by ambulance to the Corcoran Building. After the assassination of President Lincoln the Museum was again moved, this time to the Ford Theatre, and by order of the Surgeon General was opened to the public on April 16, 1867. While the Surgeon General's Library was also housed in the Ford Theatre, it was not until 1883 that the Army Medical Museum and the Library were consolidated into one division. With the steady growth of both the Library and the Museum, it soon became apparent that larger quarters were necessary and in 1887 a new fireproof building was erected on "B" Street, now Independence Avenue, at 7th Street, to house both these institutions.

When Dr. John Hill Brinton was named first Curator, the collections in the Army Medical Museum consisted of three dried and varnished specimens placed on a little shelf above the ink stand of the Curator's desk. In January 1863, only a few months after its beginning, the first catalogue of the Army Medical Museum was published. This showed a collection of 1,349 items. Once established the Museum's collections grew rapidly and the intent of the Museum was soon recognized both by the medical profession and by Congress, the former by submitting material and the latter with a yearly appropriation of five thousand dollars to "insure its continuance as well as its success."

Illustrations and plaster-cast models showing the results of surgical operations were made as early as November 1863. These were deemed to be instructive and valuable aids for future reference and study. In 1867 Surgeon

General Joseph K. Barnes invited medical officers to contribute veterinary specimens, monstrosities, Indian warfare material, and examples of poisonous snakes and reptiles, to supplement existing collections.

Dr. John Shaw Billings was appointed Curator of the Army Medical Museum and Librarian of the Surgeon General's Library in 1883. While touring Europe in 1884, in search of old books and items of medico-historic interest, he arranged with John Mayall, Jr., a secretary of the Royal Microscopical Society, London, and a well-known collector of microscopes, to purchase representative instruments for the Museum. It was Dr. Billing's hope that the Museum would ultimately have the largest and most complete collection of historic microscopes in the world. As a result, the Museum today has well over 500 microscopes, with 365 original designs. The earliest is a replica of one made by Hans and Zaccharias Jansen sometime between 1590 and 1608, and the latest is an electron microscope made in 1944 by the Siemens Company, Berlin, which Adolf Hitler purchased for his personal physician, Theodore Morrell. This latest accession was presented to the Medical Museum by the Signal Corps by whom it had been confiscated in Germany during World War II.

Thus, through the efforts of Surgeon General Joseph K. Barnes and Dr. John Shaw Billings, the scope of the Army Medical Museum was greatly broadened. While collections of microscopes, surgical instruments, and other types of medical material were added, the original intent of the founder of the Army Medical Museum was not lost sight of. The Army Medical Museum gradually became a diagnostic and research center. In 1946 it seemed appropriate to change the name to the Army Institute of Pathology, the better to reflect its major activities. It was at this time that the Medical Museum was designated as one of the four departments of the new Institute. With unification of the military services, the name was changed to Armed Forces Institute of Pathology in July 1949.

Chase Hall, a temporary building on Independence Avenue between 8th and 9th Streets was procured for the Medical Museum since space was no longer available in the building on 7th Street and Independence Avenue, and plans were made to move all exhibit material. In May 1947, this move was completed and the Medical Museum in its present quarters was officially opened to the public. Because this building was shared with other activities of the Army Institute of Pathology, exhibit area was extremely limited. Much of the contents of the Museum had to be consolidated, with the result that more than half of the historic, valuable, and irreplaceable items found their way into footlocker storage. When the Armed Forces Institute of Pathology, early in 1955, moved to its new building on the grounds of the Walter Reed Army Medical Center, the Medical Museum was separated into two sections: the Professional, or Advanced Teaching, Museum and the Public Museum. The former, intended primarily for the medical profession, and the Museum labora-

tory are located in the new building; the Public Museum remains in its downtown location.

Through the years the Medical Museum has been designated as the repository of historic instruments—in 1896 by the American Dental Association, in 1901 by the American Ophthalmological Society, and more recently by the American Urological Society. From time to time these societies present historic instruments to the Medical Museum to be placed in their respective collections. Shortly before his death in 1950, Dr. Harry Friedenwald of Baltimore presented to the Medical Museum his most cherished instrument—one of the first ophthalmoscopes made from the drawings of the inventor, Herman von Helmholtz. Collections of trephined skulls, Peruvian mummies and pre-Columbian bones, medals and stamps, original illustrations of wounds and diseases, surgical instruments, and other items of medical interest and importance have found their way into the Museum. These have been contributed by other museums, medical schools and libraries, governmental agencies, and by individual physicians and laymen.

The diversified interests and knowledge represented by the visitors necessitate departure from some of the traditional techniques for display of exhibits. Fortunately, the great variety of material available makes it possible to intermingle exhibits which will appeal to each level of interest. The Museum may combine in one room such varied exhibits as one on paleopathology, another on bloodletting practices, and a third on surgical instruments used in the Revolutionary War.

Much of the exhibit material is displayed in glass, dustproof cases. Where possible these cases are arranged in cubicles so that persons who are studying hearts, for example, are not disturbed by those viewing the exhibits of congenital abnormalities. Table-height cases containing selected items of medico-historical interest are scattered in accessible areas, and panel exhibits, usually 7 feet high and 12 to 24 feet in length, occupy available wall space.

There are differences of opinion as to the best method of displaying large collections, such as the Civil War bones or the microscopes. For instance, some favor showing only microscopes that have played an important part in the evolution of this instrument; others recommend showing each and every item because the size of the collection is in itself extremely impressive. Because of space limitations, it is possible to exhibit only about two-thirds of the total collection. These are arranged chronologically in glass wall cases, and labeled with both the designer's and maker's name. In displaying other collections of instruments, only those that show a definite change in design are selected for exhibit, the rest are filed in easily accessible storage and available for study by serious students.

From time to time panel exhibits are planned by the Museum staff, and subsequently constructed by the Medical Illustration Service of the Armed

Forces Institute of Pathology. In planning these exhibits an attempt is made to apply four basic principles: unity, clarity, accuracy, and brevity. It is important to present a connected story supplemented with pictures, original medical illustrations, and three-dimensional models. The story must be told completely and accurately in as few words as possible so that the visitor has a clear concept of one exhibit before passing on to the next. The title should at once convey the meaning of the exhibit. The captions should be clear, concise, and large enough to be read at the viewing distance of the object. The lighting should be adequate. Colored backgrounds are used wherever possible, and pegboard has been found to be a very successful medium for displaying small objects and illustrations.

For years one of the main attractions in the Medical Museum has been the section devoted to congenital abnormalities. To place emphasis on the normal it was decided to prepare an exhibit on human reproduction. This was accomplished with a series of paintings of the birth process, supplemented with models and actual specimens of the reproductive organs and embryos. The illustrations are done in oil on varying shaped pieces of masonite and mounted on pegboard center panels in 7 foot high glass cases. This is an exhibit that appeals to all ages and to all levels of interest.

The Museum is fortunate to have on its staff a professional sculptor who has been making excellent plastic models, such as reproductions of bacteriological plates and tubes, malaria parasites, and arthropods to illustrate disease processes. These three-dimensional models add greatly to the clarification and usefulness of the exhibits.

Stamps of medical interest, original illustrations, and anatomical charts are attractively shown on Multiplex display fixtures, and medals are exhibited in lighted, glass-top cases, with mirrored bottoms so that both the obverse and reverse sides may be seen. This serves a need of the numismatist.

Labelling presents two main problems. First, the label must be readable. Where possible, the legend should be printed or typed and enlarged photographically. As the former is outside the scope of the Medical Museum, and as the latter would place too heavy a burden on other departments of the Armed Forces Institute of Pathology, an electromatic typewriter with large type is used. The labels are then sprayed with plastic, to prevent smudging, and mounted on cardboard for durability. For main captions die-cut letters of varying sizes are pasted on colored cardboard or painted masonite, usually 4 inches in width. The length is, of course, determined by the amount of available space.

Secondly, the legend must be understandable. A satisfying label for the layman may be unsatisfactory for the visitor with scientific training. Moreover, interest-arousing information and scientifically important information, although both essential, can not successfully be placed on the same label, unless

the goal is a "collection of labels illustrated by specimens." The Medical Museum uses one explanatory label as an introduction to each subject, and short, concise, and simply worded labels for each item.

The educational potential of the Medical Museum was recognized as early as 1863 when Dr. Brinton addressed a letter to Acting Surgeon General Barnes requesting permission to deliver an evening course of lectures on military medicine and surgery in the halls of the Museum. Approval had to be obtained from the Secretary of War whose reaction was "They will go to the theatre and neglect their duties. It shan't be." Thus ended, for a time, a well thought out plan for disseminating a correct and general knowledge of military medicine and surgery. However, in 1888 Dr. John Shaw Billings, Curator and Librarian, announced the policy of making the educational facilities available to the civilian medical profession, and lectures and demonstrations were given to members of Congress, physicians, and lay groups interested in medical problems.

Early in 1865 arrangements were made for exchange of museum items with the Royal College of Surgeons, London, the Society for Medical Improvement, Boston, and the Pathological Society, San Francisco. In 1867 an exhibit consisting of an ambulance, medicine wagon, four litters, and a model of a general hospital were sent to the Paris Exposition. Exhibits were sent from the Museum to the Exposition at Philadelphia in 1876, and in 1892 to the Columbian Exposition, Madrid.

In keeping with these early traditions, members of the staff of the Medical Museum give lectures and tours of the Museum to medically minded civic groups, science classes, medical students, and nurses. The facilities of the Medical Museum are available to the Junior Scientists of the Washington area; members of the Museum staff take an active part in their annual fairs and are represented on their Board of Judges. Each year space in the Medical Museum is made available for ten or twelve of their outstanding exhibits. Each year both the format and content of these exhibits are better presented. Museum items are available for short-term loan to other museums, medical schools, libraries, and governmental agencies, and exhibits are shown at scientific meetings as well as at local county fairs. Occasionally exhibits of current interest are borrowed from the U. S. Navy, Veterans Administration, Armed Forces Medical Library, medical societies or research foundations for display in the Medical Museum. A scale model of the U. S. Hospital Ship Haven, has been on loan from the Navy for the past three years. Oil paintings of World War II medical art have been borrowed from the Army and the Navy. Frequently the "Exhibit of the Month" prepared by the Armed Forces Medical Library is displayed in the Museum the following month.

A program of educational medical films has been set up for Sunday afternoons; they are shown to capacity audiences. A member of the Museum staff is

available seven days a week for guide service. Arrangements are made each year with local schools for classes to have conducted tours of the Museum. Leaflets of special interest are prepared for distribution to visitors and it has been gratifying to learn that science students are given credit for making use of these leaflets in their classroom work.

The Medical Museum includes in its plans for the future a series of exhibits on specific diseases to supplement existing displays of specimens; the remounting of specimens in modern plastic containers; the use of medical illustrations as backgrounds for case exhibits; the creation of dioramas depicting significant events in medical history, and the development of transparent (plastic) push-button anatomical models and question-answer panel exhibits to induce audience participation. It is also hoped that catalogs of the various collections in the Museum will be prepared for publication.

These plans are based on the obvious need of the Medical Museum and for the appropriate utilization and display of the unique collections which have accumulated through the years. The most pressing need is for a suitable building. The Medical Museum should remain downtown in proximity to other museums. The valuable and irreplaceable items in its collections are certainly worthy of a safe, modern, and permanent home. In 1947 there were 83,000 visitors to the Museum; in 1955, 178,000. These figures show clearly the general and the professional interest in the Medical Museum, and make evident the desirability of adequate quarters for the housing of permanent displays.

The original aims of the founder of the Army Medical Museum and the functions of the Medical Museum today are aptly expressed in the Statement of Purpose which hangs in the front entrance:

"A national institution jointly sponsored by the Army, Navy, and the Air Force—dedicated to the collection, preservation, and display of military medical material—to provide instruction for the men and women of the Armed Forces, research facilities for the medical profession and information for the public."